

Designing Work Organization
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Lecture-43
Innovation for Impact

As we have seen in this previous session that is the innovation with the internal factors and the external factors which we have to consider and then we discuss about the Phillips case study also. Now, here in this particular session on the innovation for the impact, we will talk about how innovative companies benefit from innovations are there and the three horizons of the growth of the 70-20 and the 10 rule is there innovation for the impact, future trends in innovation and then as usual, we will be discussing about the case study research papers and the book recommendations and references are there. Whenever we are talking about the experience then innovative companies have the advantages of the experience in innovation a product is there and since they understand the process so well, they do not have to always go through many trial and errors. The fact that they have repeated the process several times sets them apart from the other companies who do not have an innovative culture. So here, the creativity is becoming very important. So innovative companies attract the innovative employees.

As a company maintains an innovation culture, the employees understand that they are responsible for innovations and the implementation of the new products. Moreover, every stage of the innovation process is characterized by the many experienced personnel who ensure that the process goes on smoothly. Now the leadership becomes very, very important. As a matter of fact, innovative companies are the industry leaders, they are always ahead of the others, the market, even if the others try to catch up, they cannot.

This is because the only copy they what the industry leaders do by the time they implement and the idea fully the innovative company already has a new product. Therefore, innovative companies set the pace for the industry. So here, the name recognition companies within innovation culture are known in their industry. Therefore, they do not have a huge budget on the marketing and the branding as a factor customers look forward to new products from the companies are there. There are the three origins of growth and this theory devised by the McKinsey and company is a growth management strategy that advises finding a balance between the short and long term as it relates to the projects in a portfolio.

To maximize the growth of potential, the method advises working on projects simultaneously within these three defined origins are there. So here, whenever we are

talking about the horizon 1, horizon 2 and horizon 3, so first I will start with the horizon 1. So defend and expand the current core business is there. So whenever we are talking about the growth management strategy, so always find out the balance between the short term and long term goals are there. To maximize the growth potential, the method advises working on projects simultaneously within three defined and expand the current core business is there.

So this is a value. So whenever you defend and expand the current core values, then they are the faster emerging new businesses are there. Whenever there is a new businesses, then that is giving you the seed future of businesses are there and that is 5 plus years. So here you will find that is the whenever this type of this work has been done, so you can distribute into the first is for the 1 to 2 years, then the 3 to 5 years and then the more than 5 years is there. So here, your research which I have talked earlier, that becomes a very, very important that is the your core business that you have to understand, it is what is your strength, what is your current core business is there.

And on basis of this current core business and the strengths, then you have to look towards the new businesses. So therefore, your knowledge base, your vision and the future businesses that you have to understand, once you understand the future businesses, then you will be able to come out with the vision that is 3 to 5 years is there. And that because that is immediately shift, immediately shift from 1 to 2 years to the 3 to 5 years of that is from the current business to the future businesses is there. Now here this, but when we are talking about the long term goals, then the question arises these long term goals will be the seed will be the business of the 3 to 5 years. So these 3 to 5 years of businesses that will be making these particular differences.

Now here, I would like to take these horizons one by one. For example, we talk when we talk about the horizon one, it is a phase relates to the short term projects with a view of the seeing the growth that take place between the 1 to 3 years range, it often focuses on the core of the business. So you have to first focus on your current business that is the what is the core of the business. For example, in the case of the hotels, the food industry is it is a production, the food is becoming the core of the business is there. Whenever you are talking about the pharmaceutical industries, then these R&D and developing the new formulas that becomes a core of the business.

And whenever you are talking about the automobile industries, and then you are you are the production capacity that becomes the very much important results that can be measured in a yearly review is there. So you have to understand your core business is there. Once you understand your core business, then where your company would explore and discover the new expansions. Because the everybody knows that is the organization

has to be innovative, but what to innovate that we have talked about this in the previous session, but how to innovate and where to innovate. So, this require discover the new expansion and within an expectation to see results within the range of 2 to 5 years are there and you will find that is the horizon 2 is there.

So this type of innovation could mean an idea taken from the another market and applied to a new one or the adoption of the new technology or the processes are there. The horizon 3 is the innovation that explore the entirely new possibilities and the competencies and as such should be the viewed within the 5 to 12 years lens is there. And this is where the planning and preparing for the long term ventures is implemented and is where the more radical disruptive or the architectural impact levels would happen. So therefore, when you are going for the 5 years plus, then definitely you have to explore the totally entirely new possibilities and then you have to understand what are the competencies will be there whenever you are going for this type of the new and within the 5 to 12 years is there. So, planning and preparing the long term ventures is implemented and here more radical disruptive or the architectural impact levels would happen.

So this is becoming these 70, 20 and 10 rule is there. So 70 percent is optimizing the existing products for existing customers are there. So here you find that is it is becoming these the existing incremental and the new is there and whenever we talk about these core, then the core optimize existing products for existing customers are there. So here when we find that is adjacent that is a nearby expanding from the existing business into new to the company businesses are there and therefore, it becomes the 70 percent and from here that is from 70 to adjacent, so it is going to the new that is a 20 percent and from the 20 percent it will go to the 10 percent is there. So here we find that is the how the 70, 20 and 10 rules go and the 10 percent will be the transformational is there.

Now this I can also connect with the years. So when we are going from the existing to the core, so that is becoming the core is there so 1, 2, 3 years are there and when you are going for the core to the adjacent is there, so it is creating 3 plus 5, but when you are going for the transformational and the transformational it is going to be the 5 plus is there. So developing the breakthrough our thoughts and inventing things for markets that do not existing yet is there. So this 70, 20 and 10 rules that is making this particular difference and this rule is adopted from the theory of learning which argues that you learn 70 percent by doing the work, 20 percent from the those around you and the 10 percent from the academic side of the courses or the reading are there. So here we will find that is the Former CEO of the Google, the Eric Schmidt then use this theory for the models of the innovation and created a framework for the employees at the Google to use.

70 percent focus on the core of the businesses and 20 percent as I mentioned that is the their focus in the related projects are there. However, this essentially works. So from the core initiatives, there is a current you find identify for example, your production is becoming the core of competencies there or in the case of the hospital, hotels it is a service that is becoming the core initiatives are there or the in the case of the IT applications or in the automobile industries. So therefore, in that case what core initiatives designing is becoming the very important. So therefore, that core competency is there, but the changes approach to how much time should be given to each phase.

So with a slightly different terminology, he refers to the 70 percent area as the core, the main operations of the business is there and therefore, adjacent and transformational is there. So actually the innovation, innovation is of no use if does not have any impact. So therefore, methodology is applicable for creating the both disruptive and incremental innovations and the versions of the each are used by in a major universities, national laboratories and the large global companies. It works for people in the all positions and all professionals because the value creation is the everyone's job is there. This creating the value through the actual learning.

So what sets our approach apart from others is that we consider value creation to be an exercise in active learning. So coming up a novel product or the service is not simply a matter of waiting for the inspiration to strike, but a process of using the proven practices from the education sciences to gain the insight and the improve the fast is there. So to create the efficiency and effectively in that context, people must follow a structured process that includes the five basic elements of the active learning. The first one is the interaction with the real time feedback. So in creative endeavors within the reputation is central to learning serious piano student for the example continuously practice the complex manual maneuvers and experiment with the tempo and expression and those activities are the most effective when the accompanied by the real time feedback from the expert who can reframe problems and provide the potential solutions.

So developing a new business idea is of course very different from the learning to play the piano and the inputs are undefined and may come from a range of sources. So instead of a master-apprentice relationship, the process involves in the innovation who keeps refining the idea and seeking the feedback widely. For example, peers, partners, competitors and the most importantly the customers are there. So, you may remember in the previous session I have talked about that is about the internal ideas and the external ideas are there. And therefore, here you will find that is the whenever you are talking about the customers that is the customers are giving the because they are the users.

So your product how should be actually it should come from the user, whoever is the user is there, whether the external or internal. For example, many processes are there from the one department to the next department is there and then the next department is the customer for the previous department. So what the customer needs, what customer wants, what are the challenges with the customer who are using your product that those ideas if you can capture, then definitely in that case you can seek the feedback positively and then you can reframe the problem. And the second is the multiple learning styles are there. So active learning, active learning means it is the both sides of the learning are there.

So involves applying a variety of approaches to the presenting and experimenting with the ideas. So using the images, simulations and prototypes for example, can bring these ideas to life, highlight different aspects of a problem and the challenges people is thinking about the possible solutions. Learning is effective because it can create the context of a mental model and research shows that the stories help people remember information and revise their beliefs, assumptions and theories. So whenever we are talking about the concise mental models, the psychologists assert that all of us construct mental models frameworks carried out in our minds to make the sense of our experience and inform our decisions in the active learning. We use these models to identify the valid insights and assumptions upon which we build a hypothesis for what works, we can then test our hypothesis against the collected evidence and if the warranted revise them to the develop the improved models are there.

Now working in teams increase the engagement, learning and motivation. So therefore, this research suggest that the optimal size for a business team is about the people that number allows for a diversity of the perspective and the skills. So is small enough to prevent the group from the subdividing and reduces the communication cost and the risk of the miscommunication. So frequent comparison is very becomes a very, very important. So the comparison is now we learn our preferences and decide most things, whether we are buying a new car or choosing what to eat and the research shows that the direct and rapid comparison of the two similar objects greatly amplifies the small differences.

Suppose you need new eyeglasses, if you randomly try out different pairs, it may take a while to find out that helps you see better. So therefore, in that case, these frequent comparison, the teamwork which is the working togetherness is becoming the necessity whenever you are talking about the come out with the new innovations are there. So you have to one side see the how you can reduce the cost and the other side you can see that is the how you are getting the support from these particular the parameters of these relationships. So whenever you are going for this type of the relationships, then it may

take a while to find out that is the how we can go for this particular explanations. Now here we will talk about the innovations for impact is there.

Need, approach, benefits and the competition is there. As I mentioned, that is the if you remember the R&D that model is there. So we start with the R&D, then we go for the production, then we go for the marketing and then we go for the need. So therefore, in that case, this particular need, you need not to innovate just for the innovation is required. Your organization may not need the innovation even rather than your organization is a core competency may remain as a core competency for years together.

So you have to understand. However, as we understand the business cycle and therefore, a period is required for the innovation, a life cycle, life cycle of the product is there and then it is very difficult to judge. So when is the maturity and when is the decline is there in the life cycle. So therefore, in that case, otherwise organizations are at the growth stage, growth stage to their reach to the maturity and from the maturity, they are going to be the declining is there and that will be the end of the life of the product is there. So this happens as usual by these the life lives of these whenever we are talking about all these the human beings also similarly by the human beings are there. So is there a need for the central customer and where lies our opportunity.

Now there are options either you develop your current product or you go for the divergent territories which I have talked in the previous slide. So therefore, in that case, who are our customers and the customer perspectives. The first and foremost as I always emphasize and you also know that customer is God. So whatever the product we are developing that product is for whom for a particular user, user means that customer and therefore, in that case, user may be the consumer also and they can be the customer also, but the persons who are buying your product. So therefore, in that case, first you have to try to understand that customer perspectives.

Once you understand the customer perspectives, then it question will be arises about your approaches the value propositions you look like and how do we provide it. For example, in the in case of the internal perspective, internal perspective that will be related to the resources that is what resources you are having. So what type of the resources you are having those resources will decide that is the value propositions they are provided. So here we can talk about these particular value propositions that you can see for how these value propositions they are added into the end product. And similarly, we find out the benefits are there.

So what is the qualitative and the quantitative value for the customer and for us. So this value perspective is there. Now here we have to also understand that is sometimes that is

the it becomes the easy to use that particular product, sometimes it becomes costly to buy the particular product. So whether you are going by this the quality of the product or when you are going by the in the terms of the life, in the terms of the years are there or in the terms of the cost is there and therefore, the value perspective that we have to see. So any buyer who is going for the your product, naturally he will see the value perspective is there, that is how long it is.

Now I understand in the current economy it is the economy of use and throw, but for the use period also that has to be enough justified for the cost which has been paid by the customer. So therefore, in that case the value perspective we cannot say that is the it is required for a short life cycle. No, whatever the life cycle is there, what value is added into that particular short life cycle and that will give the benefits to the customers. Finally, we come to the another factor that is a competition. So what is the competition and what are the alternatives are there? So in your competition, you might be having the certain competitors, they are large giants.

So large enterprises are there, are there are the certain competitors, those who are from coming from the unorganized sector also. So therefore, what are the alternatives do you have? And accordingly you have to see the external perspectives are there. So here when you are making this combination, this combination that is becoming a very, very important of your need, approach, benefits and the external perspectives are there, then definitely in that case, these all four dimensions when you are connecting together, then definitely you will have a business model and that will be more acceptable and more profitable will be there. So here, these impact of your innovation on the basis of the need, then your approach for that innovation, what benefits are derived from that innovation and then what is the competition situation is there. Now, I would like to give a certain framework of the NABC value proposition is there.

This need approach benefits competition NABC, the offering should fill a significant gap in the market is there. So naturally, as I mentioned, the offering should meet the customer's needs in a unique compelling and defensible way and present an attractive business model for the investors. So, benefits relative to the cost is there, the offering should provide obviously superior value for the customers. So, customer should find the offering consistently more appealing than the alternatives are there. And therefore, when we talk about these NABC value proposition and that should what at the end what it should give, it should give the customer satisfaction.

If you are giving this customer satisfaction, but then definitely your external perspectives and internal perspectives, they are very judiciously have been measured. Now, I would like to talk about the future trends in the innovation is there. Right from

the beginning, I am talking about that industry 4.0 and then in that case, that is the AI.

So, AI is reinventing the way we invent is there. So, lifestyle is changing. The greater the impact of the artificial intelligence AI may not be there through widely known applications like the driverless cars or the image recognition, but through the altering the process of innovation is there. So, on AI means, it is not necessarily that is it is becoming the very high cost products and then it can be into the small the products also. I would like to give you just an example of the business games or the video games are there and therefore, in that case, when you are making the AI into as a part of these product, then definitely you will find that is your cost has been reduced a lot and in the long terms you find that is your ROI becomes very high. So, these machines and getting creative the another trend in the innovations are the machines are getting creative.

So, advantages, advances in the artificial intelligence are giving machines the ability to create the novel designs. As I mentioned, that is in the certain products, for example, the cars are concerned, automobile industries are concerned, then you will find that is a novel designs are there. So, then they simply optimize the existing solution as had been done in the past. This process of the digital generative design involves innovations providing machines with the goals and the constraints from which the solutions are generated through a process that initiates the biological evolution is there. When we talk about the trend 3, open innovation is going micro and the innovation process and large innovation challenges are starting to be the problem that is to be broken down into the smaller challenges and in an evaluations of the open innovations and this micro open innovation is now the large enough to sustain smaller challenges which are more attractive to individuals who want to learn.

So, develop the portfolios and do not have access to the substantial teams or resources. So, efforts to remove the biases from these funding decisions are there. So, there is the increasing recognition that the current system of funding new ideas can be biased with the mixed gender founder teams and therefore, making up a lower proportion of the investments by the venture capitalist then the feature decides the proposals venture capitalizes the receive. Thus, novel methods of the decision making can make innovation funding not only fairer but also more efficient and support the bolder ideas. This distributed and adaptive innovation teams or innovation leaders are starting to galvanize people around challenges in small relatively innovation that autonomous multidisciplinary teams and these are the coordinated more through the shared mission, culture and principles.

So, these then the traditional management hierarchies, this more distributed way of organizing the offers flexibility and is more suited to taking the complete problems then

direction from the centers are there. And here we find that high innovations they are the collocated and they partially distributed or the dispersed are there and partially distributed are the dispersed this low innovation that is giving you these the low trust and low innovation. If there is a low trust and low innovation then partially distributed or the dispersed are there, but when there is a high trust and high innovation and that is partially distributed or the dispersed management hierarchies will be higher. So, this is the different we have to understand that is how these processes that is the future trend in innovations they are going on.

The next is the Firefly companies. So, these decentralized autonomous organizations or DAOs are the companies powered by the automated smart contracts on these blockchains such as a disease and these entities are routinely and rapidly form and close autonomously that is the without any human involvement. Thus, Firefly companies may become a way of rapidly prototyping organizations that will be capable of testing new markets and the capturing the value from their own them without any human inventions or the overheads are there. Whenever we are talking about these the future trends, it comes the mindset and mindset is being the emphasized over method. So, at the number of innovation methods multiply that our understanding of the innovation processes matures there has been the growing interest in the mindsets required by the innovators and the innovation leaders that allows them to adopt to the fast changing and the uncertain context is there. And therefore, this mindset is becoming the everything and this mindset which is creating the success for the innovative products.

Innovation are fostering the neurodiversity to the spur innovation. So, neurodiversity where the neurological differences such as the autism, dyslexia are the recognized and respected as much as many other human variation as gaining traction as a feature not a bug for the innovation teams. And this builds on a growing recognition by companies the slack of the importance of the diversity and not only for the moral reasons, but also to strengthen the innovation is there. This is the case study of the Coca-Cola company and here you will find that is this journey of this particular company that is how electricity is derived due to the which the several Coca-Cola outlets either did not have any the chilling equipment survey operating out of then ice box is there. So, therefore, thus when the Singh returned to Delhi, he laid down.

So, there it has been observed in 5 kilometers in its search that too from an unreliable source a lot of times to the this technical team to deploy a simple and commercially viable solution and that would enable these retailers to serve the child. So, the biggest challenge that the company faced while developing a solar cooler was to come up with a system that was not only simple, reliable and sustainable, but also the price optimally. These Coca-Cola companies furthermore a system based on AC configuration would

require the retailer to have an inverter and batteries whereas the DC system product was completely integrated, such as the solar lantern and mobile charging and these ports that added value to the equipment were provided to the each AC cool device. And this eco cool device was tested in various formats in the rural areas. First it was installed on a mobile trolley which had the solar panel and could be driven around by a tricycle.

So then the options of a push cart was tried out and following the feedback of which it was finally decided that a standalone version would be adopted in turn into be the most successful of all the version that were tried out. So models used to install the eco cool, the tricycle version, the roof top solar panels that were linked to the chest style coolers installed inside the store below. So, usually a standalone outlet in the rural India was designed in a way that allowed the women to the manage the store as well as the family needs at the same time. So, as these are front portion here then we find that is there the woman that is there to this economically and had to manage the stores and their household simultaneously.

So organized to make the things easier for them is there. So, this eco cool innovation thus had the potential to expand the Indian market by making the product available in areas that previously did not have it. This is the research paper that is engaging in innovation and investigate into the implications of the engagement at work on innovative behavior in the healthcare organizations. This paper will help you to understand that is how the innovations are becoming more useful. This is a book recommendation innovation by design is there by these the Thomas Lockwood and the Edgar Pupke. So therefore, you will find out that is the in this book, the 10 attributes leaders can use to create and develop the effective culture of innovation and how to leverage the natural influence of the collective imagination to produce the full effect of creativity and risk taking.

So, innovation by design and solutions for today's businesses need further relevant innovation. These are the references which you can refer and I am sure you will come to know that is how innovations that has become very useful in the case of the whenever there is a customer need is there and then you are doing the R&D and reaching to the satisfaction of your customers through the innovative products. Thank you.